

Notice of Allowability

Application No.

09/982,886

Examiner

Gary C. Vieaux

Applicant(s)

HASHIMOTO, SEIJI

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment dated August 9, 2006.
2. ☒ The allowed claim(s) is/are 10-17 (now formally renumbered as claims 1-8).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

Amendment

The Amendment, filed August 9, 2006, has been received and made of record.
In response to the most recent Office Action, dated January 11, 2006, claim 10 has
5 been amended, claims 14-17 have been added, and claims 1-9 have been cancelled.

Response to Amendment

In response to Applicant's amended title, the Examiner finds the title to be more
clearly indicative of the invention to which the claims are directed, and therefore, the
10 objection to the title is withdrawn.

Response to Arguments

Applicant's arguments filed August 9, 2006, have been fully considered, and,
taken in light of the current amendments, are persuasive.
15

Allowable Subject Matter

Claims 10-17 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claims 10-17, the prior art is not found to teach or fairly suggest, in
20 combination with the existing elements of the present claims as currently amended, an
image pickup apparatus comprising a plurality of CCDs adapted to transfer charges
generated by the photoelectric conversion units, each of the plurality of CCDs being

arranged correspondingly to each line of photoelectric conversion units, a plurality of charge detection circuits adapted to detect the charges from the CCDs and supplying corresponding signal levels, each of the plurality of charge detection circuits being arranged correspondingly to each CCD, and a plurality of A/D conversion circuits

5 adapted to generate digital signals from the differences between the signal levels supplied by the charge detection circuits and noise levels of the photoelectric conversion units, respectively, each of the A/D conversion circuits being arranged correspondingly to each charge detection circuit, and a plurality of circuit elements, each providing a ramp-shaped reference voltage to a respective one of the plurality of

10 charge detection circuits in response to receiving a digital signal from a respective one of the plurality of A/D conversion circuits.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

15 accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to

20 applicant's disclosure.

Lu et al. (US 2004/0017494 A1) discloses the use of ramp voltage in conjunction with a counter for signal measurement.

Boemler et al. (US 6,965,407) discloses the use of ramp voltage in conjunction with a counter for signal measurement.

Contact

5 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary C. Vieaux whose telephone number is 571-272-7318. The examiner can normally be reached on Monday - Friday, 8:00am - 4:00pm.

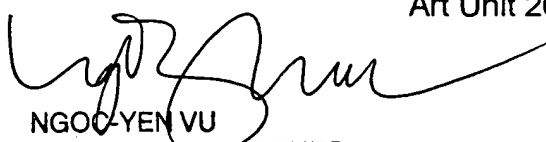
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NgocYen T. Vu can be reached on 571-272-7320. The fax phone number
10 for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.
15 For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Gary C. Vieaux
Examiner
Art Unit 2622

Gcv2


NGOC-YEN VU
SUPERVISORY PATENT EXAMINER